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10/598,373	12/27/2006	Stanley Shigezo Swallow	78104114 - KE/GM/N19082	3270
25005	7590	01/21/2011	EXAMINER	
Intellectual Property Dept. Dewitt Ross & Stevens SC 2 East Mifflin Street Suite 600 Madison, WI 53703-2865			CHOI, PETER Y	
			ART UNIT	PAPER NUMBER
			1786	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-ip@dewittross.com

Office Action Summary	Application No. 10/598,373	Applicant(s) SWALLOW ET AL.	
	Examiner PETER Y. CHOI	Art Unit 1786	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8,9,15,17,18 and 27-42 is/are pending in the application.
- 4a) Of the above claim(s) 27 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8,9,15,17,18,28-35 and 37-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on August 26, 2010, has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 41 and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 41 and 42, the claims recite that the conductive path within the fabric includes multiple electrically conductive filaments or fibres or elements connected in parallel, with the number of parallel filaments or fibres or elements being at least an order of magnitude greater than the number of electrically conductive filaments or fibres or elements defining

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terminal lengths of the conductive path. Applicants' specification does not provide support for the claimed limitations.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 41 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 41 and 42, the claims recite that the conductive path within the fabric includes multiple electrically conductive filaments or fibres or elements connected in parallel, with the number of parallel filaments or fibres or elements being at least an order of magnitude greater than the number of electrically conductive filaments or fibres or elements defining terminal lengths of the conductive path. It is unclear what "terminal lengths of the conductive path" necessarily entails, as conductive paths may have various terminal lengths when arranged in parallel. Additionally, Applicants' specification does not provide explicit support for the limitations.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1, 8, 9, 17, 18, 20, 28-32, 34, 35, and 37-40 are rejected under 35 U.S.C. 102(b) as anticipated by US Pub. No. 2003/0119391 to Swallow.

Regarding claim 1, Swallow teaches a fabric having a woven construction, including in its woven construction a plurality of spaced first elongated electrically conductive filaments or fibers and a plurality of spaced second elongated electrically conductive filaments or fibers, the first elongated electrically conductive filaments or fibers being crossed by the second elongated electrically conductive filaments or fibers at a plurality of crossover points (Swallow, Abstract, paragraph 0005), wherein the fabric includes a warp and a weft, the warp including at least one of the first electrically conductive filaments or fibers and the weft including at least one of the second electrically conductive filaments or fibers (Id., paragraphs 0007, 0011), wherein the fabric includes insulating fibers or filaments which bias the first and second electrically conductive filaments or fibers apart at a crossover point (Id., paragraph 0011), wherein the woven construction includes yarn and the first and/or second electrically conductive filaments or fibers include warp and/or weft floats over or under more than one yarn to effect the biasing apart of first and second electrically conductive filaments or fibers at a crossover point (Id., paragraph 0042), wherein the fabric includes at least one instance of a crossover point at which the first and second electrically conductive filaments or fibers are permanently biased apart and at least one instance of a crossover point at which the corresponding first and second electrical conductors are permanently physically connected together (Id., paragraph 0073), wherein the one or more crossover points at which the corresponding first and second electrically conductive filaments or fibers are permanently physically connected together are effected by means of a plain weave structure local to the crossover point (Id.), wherein the permanently connected

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crossover points and the permanently biased apart crossover points bring into being at least one conductive path within the fabric that is composed of two or more contiguous segments of two or more electrically conductive filaments or fibers (Id., Figures 10 and 12; see additionally paragraphs 0001-0004, 0006, 0008-0010, 0035-0041, 0043, 0060-0072, 0076-0092, claims 1-16, Figures 1-9 and 11).

Swallow appears to teach that the continuous segments of electrically conductive filaments or fibers have a length and/or number and/or arrangement and/or linear resistance chosen so as to constitute one or more resultant conductive paths that conform to a desired geometry and a desired electrical characteristic (see for example Swallow, paragraphs 0076-0092, Figures 10-12).

Additionally, the limitations directed to the above-mentioned properties chosen so as to constitute one or more resultant conductive paths that conform to a desired geometry and a desired electrical characteristic are alternatively interpreted as intended use limitations. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since Swallow teaches a substantially similar structure and composition as the claimed invention, the invention of Swallow appears capable of performing the claimed use.

Regarding claim 8, Swallow teaches that the fabric includes insulating warp fibers neighboring an electrically conductive filament or fiber in the warp, wherein the neighboring insulating warp fibers to an electrically conductive filament or fiber in the warp include a warp

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float over or under more than one weft yarn (Swallow, paragraphs 0008, 0011, 0012, Figures 3 and 9-12; see additionally paragraphs 0001-0007, 0009, 0010, 0013-0020).

Regarding claim 9, Swallow teaches that the fabric includes a warp and a weft and insulating weft fibers neighboring an electrical conductor in the weft, wherein the neighboring insulating weft fibers to an electrical conductor in the weft are subject to a weft float over or under more than one warp yarn (Swallow, paragraphs 0008, 0011, 0012, Figures 3 and 9-12; see additionally paragraphs 0001-0007, 0009, 0010, 0013-0020).

Regarding claim 17, Swallow teaches that the electrical characteristic is at least electrical resistance (Swallow, paragraphs 0009, 0037).

Regarding claim 18, Swallow appears to teach that the electrical characteristic is a heterogeneous distribution of resistance along the resultant conductive path and/or across the fabric (Swallow, paragraphs 0009, 0015, 0037, Figures 10 and 12).

Regarding claim 20, Swallow appears to teach that the fabric provides an electrical heating element that exhibits a heterogeneous distribution of heated power dissipation along the resultant conductive path and/or across the fabric (Swallow, paragraphs 0076-0084, Figure 10). Alternatively, although Swallow does not disclose the claimed properties, the claimed properties are deemed to be inherent to, or naturally flow from, the structure in Swallow, since Swallow teaches an invention with a substantially similar structure and chemical composition as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicants to prove otherwise.

Regarding claim 28, Swallow appears to teach that the conductive path is arranged in series along a spiral path (Swallow, Figures 10-12).

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Regarding claim 29, Swallow appears to teach that the fabric includes a parallel structure comprised of a multitude of parallel sub-paths, and that the conductive path is comb-like, with the fingers of the combs being interlaced (Swallow, paragraphs 0071-0092, claim 14, Figures 10-12).

Regarding claim 30, Swallow teaches a fabric having a woven construction with a warp and a weft, the fabric including several spaced elongated first electrically conductive elements included in the warp of the fabric, several spaced elongated second electrically conductive elements included in the weft of the fabric, and crossing the first electrically conductive elements at several crossover points (Swallow, paragraphs 0006, 0007), and elongated insulating elements in the warp and/or weft of the fabric (Id., paragraph 0011), wherein the fabric includes one or more crossover points at which the first and second electrically conductive elements are permanently biased apart (Id., paragraphs 0005, 0011, 0012), the permanent biasing being effected by warp and/or weft floats of the first and/or second electrically conductive elements over or under more than one of the elongated insulating elements (Id., paragraphs 0008, 0012, 0042), and one or more crossover points at which the first and second electrically conductive elements are permanently in conductive communication (Id., paragraph 0073), the permanent conductive communication being effected by a plain weave in the warp and weft at the crossover point (Id.), wherein the permanently biased apart crossover points and the crossover points in permanent conductive communication generate at least one conductive path within the fabric that includes two or more contiguous segments of two or more of the electrically conductive elements (Id., Figures 10 and 12; see additionally paragraphs 0001-0004, 0006, 0008-0010, 0035-0041, 0043, 0060-0072, 0076-0092, claims 1-16, Figures 1-9 and 11).

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Swallow appears to teach that the contiguous segments together having one or more of a length, a number, an arrangement, and/or a linear resistivity, with the conductive paths providing a desired geometry and desired electrical characteristics (see for example Swallow, paragraphs 0076-0092, Figures 10-12).

Additionally, the limitations directed to the above-mentioned properties chosen so as to constitute one or more resultant conductive paths that conform to a desired geometry and a desired electrical characteristic are alternatively interpreted as intended use limitations. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since Swallow teaches a substantially similar structure and composition as the claimed invention, the invention of Swallow appears capable of performing the claimed use.

Regarding claim 31, Swallow teaches that the warp includes elongated insulating elements, and an elongated electrically conductive element neighboring the elongated insulating elements, wherein the insulating elements include a warp float over or under more than one of the elements in the weft (Swallow, paragraphs 0008, 0011, 0012, Figures 3 and 9-12; see additionally paragraphs 0001-0007, 0009, 0010, 0013-0020).

Regarding claim 32, Swallow teaches that the weft includes elongated insulating elements, and an elongated electrically conductive element neighboring the elongated insulating elements, wherein the insulating elements include a weft float over or under more than one of the

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elements in the warp (Swallow, paragraphs 0008, 0011, 0012, Figures 3 and 9-12; see additionally paragraphs 0001-0007, 0009, 0010, 0013-0020).

Regarding claim 34, Swallow teaches that the desired electrical characteristics include the electrical characteristic is at least electrical resistance (Swallow, paragraphs 0009, 0037).

Regarding claim 35, Swallow appears to teach that the desired electrical characteristics include a heterogeneous distribution of resistance along one or more of the conductive path and/or the entire fabric (Swallow, paragraphs 0009, 0015, 0037, Figures 10 and 12).

Regarding claim 37, Swallow appears to teach that the conductive path is arranged in series along a spiral path (Swallow, Figures 10-12).

Regarding claim 38, Swallow teaches that the conductive path includes interdigitated subpaths (Swallow, Figure 3-12).

Regarding claim 39, Swallow teaches that the fabric lacks electrically conductive filaments or fibers which are spaced apart, but biasable into conductive connection (Swallow, Figures 10 and 12).

Regarding claim 40, Swallow teaches that the fabric lacks any crossover points at which conductive elements are biased apart, but bias able into conductive communication (Swallow, Figures 10 and 12).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 8, 9, 17, 18, 20, 28-32, 34, 35, and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swallow.

Regarding claims 1 and 30, Swallow appears to teach that the continuous segments of electrically conductive filaments or fibers have a length and/or number and/or arrangement and/or linear resistance chosen so as to constitute one or more resultant conductive paths that conform to a desired geometry and a desired electrical characteristic. Alternatively, it would have been obvious to one of ordinary skill in the conductive fabric art at the time the invention was made to form the conductive fabric of Swallow, and adjusting the segments to have a desired length and/or number and/or arrangement and/or linear resistance, based on the desired electrical characteristics and the electrical switch arrangement suitable for the desired application.

Regarding claim 28, it would have additionally been obvious to one of ordinary skill in the conductive fabric art at the time the invention was made to form the conductive fabric of Swallow, wherein the conductive path is arranged in series along a spiral path, as it is within the level of ordinary skill to determine a suitable conductive path based on the desired electrical conductivity and sensitivity suitable for the intended application.

Regarding claims 41 and 42, Swallow teaches that the conductive path within the fabric includes multiple electrically conductive filaments or fibres or elements connected in parallel (see for example Swallow, paragraph 0035, Figure 10). Swallow does not appear to teach the number of parallel filaments or fibres or elements being at least an order of magnitude greater than the number of electrically conductive filaments or fibres or elements defining terminal

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lengths of the conductive path. However, Swallow teaches that the electrical conductors are arranged to form an arbitrarily spaced grid (see for example Id., paragraph 0035). Additionally, it is unclear the metes and bounds and therefore the scope of the claims. Since Swallow teaches that the arrangement of the electrical conductors are variable, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the conductive textile of Swallow, and determining a suitable number of filaments or fibers or elements such that, as best Examiner can determine, the number of filaments is at an order of magnitude greater than the number of filaments or fibers or elements defining terminal lengths of any path, as it is within the level of ordinary skill to determine a suitable number of electrical conductors based on, for example, the desired electrical conductivity and sensitivity of the conductive textile, and based on the desired terminal lengths suitable for the intended application.

10. Claims 15, 18, 20, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swallow, as applied to claims 1, 8, 9, 17, 18, 20, 28-32, 34, 35, and 37-42 above, in view of USPN 6,333,736 to Sandbach.

Regarding claims 15 and 33, Swallow does not appear to teach that the two or more contiguous segments are of two or more electrical conductors that exhibit differing linear resistivities. Since Swallow does not teach the specific electrical conductors suitable for the invention of Swallow, it would have been necessary and therefore obvious to look to the prior art for conventional electrical conductors. Sandbach teaches a substantially similar electrically conductive woven fabric as Swallow, comprising electrically conductive elements, relatively low resistance conductive elements and insulating elements, wherein the sizes of the conductive

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elements may be adjusted in comparison to the insulating elements (Sandbach, column 1 line 5 to column 2 line 7, column 2 lines 52-67, column 3 lines 1-30, column 6 lines 45-67, column 7 line 1 to column 8 line 13, column 9 line 57 to column 9 line 13). Sandbach teaches that the resistivity may be controlled by selecting an appropriate fiber type or adjusting the thickness of the fiber. Sandbach teaches that the inclusion of conductive and low resistance conductive elements makes it possible for a voltage indicative of position to be determined. It would have been obvious to one of ordinary skill in the electrically conductive textile art at the time the invention was made to form the electrically conductive textile of Swallow, wherein the conductive elements are of variable size and resistivity, as taught by Swallow and Sandbach, motivated by the desire of forming a conventional electrically conductive textile with conductive elements known in the art to be predictably suitable for use in electrically conductive textiles, and one of ordinary skill in the art would recognize that varying the resistivities in the textile would similarly predictably vary the electrical properties of the textile and within the textile, based on the desired application.

Regarding claims 18, 20 and 35, the prior art combination appears to teach that the electrical characteristic is a heterogeneous distribution of resistance along the resultant conductive path and/or across the fabric and that the fabric provides an electrical heating element that exhibits a heterogeneous distribution of heated power dissipation along the resultant conductive path and/or across the fabric. Additionally, the prior art combination teaches an electrically conductive woven fabric comprising electrically conductive elements, relatively low resistance conductive elements and insulating elements, wherein the conductors exhibit differing linear resistivities. Although the prior art combination does not specifically disclose the claimed

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properties, the claimed properties are deemed to naturally flow from the structure in the prior art combination, since prior art combination teaches an invention with a substantially similar structure and chemical composition as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicants to prove otherwise.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swallow, as applied to claims 1, 8, 9, 17, 18, 20, 28-32, 34, 35, and 37-42, or alternatively over Swallow in view Sandbach, as applied to claims 15, 18, 20, 33, and 35 above, in view of USPN 5,422,462 to Kishimoto.

Regarding claim 20, Swallow appears to teach that the fabric provides an electrical heating element that exhibits a heterogeneous distribution of heated power dissipation along the resultant conductive path and/or across the fabric (Swallow, paragraphs 0076-0084, Figure 10). Additionally, Swallow teaches that the conductive textile can be used as a pressure sensor or switch or other conductive device within a single layer of fabric.

As additional evidence, Kishimoto teaches a woven conductive fabric which can be used to provide a significantly safe and bendable heating sheet, comprising conductive yarns and insulating yarns as warps and wefts (Kishimoto, column 1 lines 5-8, column 2 lines 16-45, column 2 lines 64 and 65, claim 1). Kishimoto teaches that an electrode is connected to each end of the conductive yarn, such that each yarn is connected in parallel condition to each electrode (Id., column 3 lines 30-61). It would have been obvious to one of ordinary skill in the conductive fabric art at the time the invention was made to form the conductive fabric of

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Swallow or the prior art combination, wherein the fabric is provided as an electrical heating element, as taught by Kishimoto, motivated by the desire of forming a conventional conductive fabric having a configuration known in the art as being predictably suitable for forming similar conductive fabrics having an electrical heating element.

Response to Arguments

12. Applicants' arguments filed August 26, 2010, have been fully considered but they are not persuasive. Applicants argue that Examiner has not provided a particular indication of where claimed features are believed to be present in the prior art. Examiner respectfully disagrees. Although the prior art (i.e. US Pub. No. 2003/0119391 to Swallow) comprises identical inventorship and overlapping features as the currently examined Application, the claimed features were properly recited by reference to Swallow. Additionally, as set forth above, further identification of each of the features has generally been set forth above.

Applicants argue that the present application describes fabrics/circuits wherein certain crossing conductors are permanently spaced, or alternatively permanently connected, to achieve desired electrical properties, and that Examiner has not shown where Swallow shows or suggests such matter. Examiner respectfully disagrees. As shown in, for example, Figures 10 and 12 of Swallow, such limitations are recited in Swallow.

Applicants argue that since Swallow is directed to circuits/fabrics with changeable geometry and electrical properties, whereas the claimed invention is directed to fixed geometry/properties, it cannot be fairly said that one of ordinary skill, who knew of Swallow but not of the claimed invention, would contemplate the claimed invention in view of Swallow.

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Examiner respectfully disagrees. Applicants do not claim fixed geometry or properties.

Therefore, Applicants' arguments are not commensurate in scope with the claimed invention.

Additionally, it should be noted that Swallow does not teach that the resulting circuit or fabric, once formed, necessarily comprises various geometry and electrical properties.

Applicants argue that no ordinary artisan would contemplate modification of Swallow to generate a circuit/fabric lacking "switchable" conductive connections, and including only permanent conducting and non-conducting connections. Examiner respectfully disagrees. The claimed invention does not require the circuit/fabric to lack switchable conductive connections. Therefore, Applicants' arguments are not commensurate in scope with the claimed invention. Additionally, as set forth above, Swallow teaches that the fabric lacks electrically conductive filaments or fibers which are spaced apart, but biasable into conductive connection, and that the fabric lacks any crossover points at which conductive elements are biased apart, but bias able into conductive communication (Swallow, Figures 10 and 12).

Applicants argue that no ordinary artisan would contemplate the claimed arrangements in view of Swallow, because there is no apparent use for, or benefit to, the claimed "massively parallel" structures. Examiner respectfully disagrees. "Massively parallel" structures are not claimed. Therefore, Applicants' arguments are not commensurate in scope with the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER Y. CHOI whose telephone number is (571)272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peter Y Choi /PYC/
Examiner, Art Unit 1786

/D. Lawrence Tarazano/
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